POLI 395: Applied Research Methods

Fall 2019

Razor 119 TTh 1:00 – 2:15

Rick K. Wilson
Professor of Political Science

E-mail: rkw@rice.edu

Office: 118 Herzstein Hall
Office Hours: M 9:00 – 10:30 AM
W 3:00 – 4:00 PM
Phone: 713.348.3352

COURSE OBJECTIVES AND LEARNING OUTCOMES

This course introduces students to basic ideas in scientific epistemology, social science research design, and the application of all these ideas to substantive questions in political science.

Students will be able to:

1. understand basic approaches to the scientific study of the social world to substantive topics in political science;
2. execute and interpret statistical analysis of quantitative political data to answer about substantive questions in political science; and
3. recognize and understand threats to inference based on empirical data in political science, including the weaknesses of research designs and statistical analyses.

GRADING POLICIES AND ASSIGNMENT DETAILS

Grade Components:

- R lab exercises: 25%
- Individual and Group assignments: 25%
- Participation 10%
- Group Poster: 15%
- Group Paper: 25%

Exams: There are no exams in this class. Posters will be presented during the scheduled final exam time.

R lab exercises: There is a one-hour R Lab each week. That lab will be staffed by a graduate student who will help you with learning R (more below concerning R). Each lab will have an exercise that will be graded. You may work with others in completing these exercises. However, you must turn in your own work.

Attendance: Attendance is advisable. Class time will be spent on multiple group projects. Class time will also provide you an opportunity to ask questions of the instructor concerning readings, etc. The class will not be a lecture-based class. Instead it will involve considerable hands-on work.

Individual and Group exercises: Toward the beginning of the semester you will select into a group. The group will focus on a specific research question and over the course of the semester you will learn how to answer your group's question. Throughout the semester there will be individual and group projects designed to teach you aspects of research design. You may expect an assignment each week.

Group Poster: In the last week of the semester your group will present a poster detailing your group's project. You will learn the basics of designing a scientific poster and will be expected to present your results.

Group Paper: At the end of the semester your group will provide a written paper concerning your project.

COURSE POLICIES

T/A Office Hours: The teaching assistant for this class is Carly Mayes, a PhD student in the political science department. Carly will conduct lab sessions scheduled for Thursday evenings at 7 pm and Friday afternoons at 1:00. Her office is located in Herzstein 124 and you can email her at carlymm@rice.edu.

Late Work: Assignments are due at the date and time specified on Canvas. Late assignments will be marked off at 5 percentage points for the first 24 hours late, and an additional 10 percentage points for every subsequent 24 hours late.

Important note: Students are responsible for submitting working, uncorrupted files for all assignments. If a file is corrupted and needs to be re-sent, and re-sending happens after the assignment deadline, a late penalty will be assessed.

Penalties for late R Lab exercises or missed assignments may be waived under the following three circumstances:

(1) a death in the immediate family (parent, spouse, sibling, or child) within two weeks before the assignment due date;
(2) in the event of an unforeseeable medical emergency affecting you, your spouse, or your child; or
(3) participation in a Rice-sponsored academic or sporting event.

In the event of (1) or (3), you must give me **at least 24 hours advance notice and preferably more** (via e-mail or a phone call) that you will miss the assigned task, or it

may not be made up. I may require supporting documentation. All penalty waivers are at the discretion of the instructor. Under these circumstances, I will extend your homework due date. **Important note: conflicts with a work schedule, non-academic trip, or vacation are not a valid reason to miss any assignment** and cannot be the basis for a penalty waiver.

Honor Code/Academic Misconduct: All forms of academic misconduct will be handled according to the Rice University Honor Code. Details on the Honor Code are available at http://honor.rice.edu/honor-system-handbook/.

If you ever have any questions about what you should do to stay within the honor code on a particular assignment, **contact me with your question and I can assist you**. I cannot guarantee a timely response unless you contact me at least 24 hours in advance of the time the assignment is due.

Students with Disabilities: If you have a disability and require accommodation in this class, please contact me as soon as possible (within the first two weeks of class) to discuss these accommodations. You will also need to contact the Disability Support Services Office (telephone extension: 5841) in the Allen Center.

Syllabus Change Policy: All policies of this syllabus may be changed by Prof. Wilson with advance notice.

COURSE MATERIALS

Required Text:

- Dimiter Toshkov. *Research Design in Political Science*. Palgrave Macmillan, 2016.

Other readings are available on Canvas.

Software: This course will teach material primarily through R. R is an open source, free statistical program. You will need to install R on your own computer.

R is free and available for Windows and Macintosh from http://cran.r-project.org/. RStudio is also free and available for Windows and Macintosh at http://www.rstudio.com.

All students must have a valid Rice e-mail address and login (and access to Canvas) to participate in this course.

COURSE OUTLINE AND ASSIGNED READINGS

Date	Topic	Readings
Aug. 27	**Course Introduction**	Read one of the following: Thewissen, Stefan, and Olaf van Vliet. "Competing with the Dragon: Employment Effects of Chinese Trade Competition in 17 Sectors across 18 Oecd Countries." *Political Science Research and Methods* 7, no. 2 (2019): 215-32. Anderson, Noel, and Alec Worsnop. "Fatality Thresholds, Causal Heterogeneity, and Civil War Research: Reconsidering the Link between Narcotics and Conflict." *Political Science Research and Methods* 7, no. 1 (2019): 85-105. Pan, Jennifer. "How Chinese Officials Use the Internet to Construct Their Public Image." *Political Science Research and Methods* 7, no. 2 (2019): 197-213. Masket, Seth. "What Is, and Isn't, Causing Polarization in Modern State Legislatures." *PS: Political Science & Politics* 52, no. 3 (2019): 430-35.
Aug. 29	**Political Science Questions?**	Toshkov, Chapter 1
Aug. 30	**Basics of RStudio**	Lab
Sept. 3	**Types of Research**	Toshkov, Chapter 2, pp. 23 - 44.
Sept. 5	**Research Questions**	Toshkov, Chapter 2, pp. 44 - 55 Gustafsson, Karl, and Linus Hagström. "What Is the Point? Teaching Graduate Students How to Construct Political Science Research Puzzles." *European Political Science* (2018): 1-15.
Sept. 6	**R and data exploration**	Lab

Sept. 10	**Literature**	Toshkov, Chapter 3, pp. 56 - 67 Knopf, Jeffrey W. "Doing a Literature Review." *PS: Political Science & Politics* 39, no. 1 (2006): 127-32. The "CRAAP" test (in readings)
Sept. 12	**Literature/Theory**	Toshkov, Chapter 3, pp. 67 - 80
Sept. 13	**R Graphics**	Lab
Sept. 17	**Hypothesis Generation**	Toshkov, Chapter 3, pp. 80 - 82 Mutz, Diana C., and Jahnavi S. Rao. "The Real Reason Liberals Drink Lattes." *PS: Political Science & Politics* 51, no. 4 (2018): 762-67.
Sept. 19	**Concepts**	Toshkov, Chapter 4, pp. 81-100
Sept. 20	**R and data transformation**	Lab
Sept. 24	**Operationalizing Concepts**	Toshkov, Chapter 4, pp. 100-106. Rauschenbach, Mascha, and Katrin Paula. "Intimidating Voters with Violence and Mobilizing Them with Clientelism." *Journal of Peace Research* 56, no. 5 (2019): 682-96.
Sept. 26	**Measurement (1)**	Toshkov, Chapter 5, pp. 107-116
Sept. 27	**R and putting together your data**	Lab
Oct. 1	**Measurement (2)**	Toshkov, Chapter 5, pp. 117 - 122 van der Windt, Peter. "Can Development Aid Empower Women? Evidence from a Field Experiment in the Congo." *The Journal of Politics* 80, no. 3 (2018): 1039-44. (And Appendix)
Oct. 3	**Measurement (3)**	Toshkov, Chapter 5, pp. 123 - 144

Oct. 4	**R and creating measures**	Lab
Oct. 8	**Measurement (4)**	Kastellec, Jonathan P., and Eduardo L. Leoni. "Using Graphs Instead of Tables in Political Science." *Perspectives on politics* 5, no. 4 (2007): 755-71.
Oct. 10	**Causality (1)**	Toshkov, Chapter 6, pp. 145 - 160 van Weezel, Stijn. "On Climate and Conflict: Precipitation Decline and Communal Conflict in Ethiopia and Kenya." *Journal of Peace Research* 56, no. 4 (2019): 514-28.
Oct. 11	**R and completed data frame**	Lab
Oct. 15	**Midterm Recess**	
Oct. 17	**Causality (2)**	Toshkov, Chapter 6, pp. 160 - 165
Oct. 18	**R and measures of association**	Lab
Oct. 22	**Experimental Design (1)**	Toshkov, Chapter 7, pp. 166 - 186
Oct. 24	**Experimental Design (2)**	Toshkov, Chapter 7, pp. 186 – 199. Munger, Kevin. "Tweetment Effects on the Tweeted: Experimentally Reducing Racist Harassment." *Political Behavior* 39, no. 3 (2017): 629-49.
Oct. 25	**R – Planning your analysis**	Lab
Oct. 29	**Large-N Designs (1)**	Toshkov, Chapter 8, pp. 200 - 227
Oct. 31	**Large-N Designs (2)**	Toshkov, Chapter 8, pp. 227 - 257 Gerber, Alan S., Donald P. Green, and Christopher W. Larimer. "Social Pressure and Voter

		Turnout: Evidence from a Large-Scale Field Experiment." *American Political Science Review* 102, no. 1 (2008): 33-48.
Nov. 1	**R – Carrying out your analysis**	Lab
Nov. 5	**Comparative Designs (1)**	Toshkov, Chapter 9, pp. 258 - 269
Nov. 7	**Comparative Designs (2)**	Toshkov, Chapter 9, pp. 269 – 284 TBA Reading
Nov. 8	**R - TBA**	Lab
Nov. 12	**Case Studies (1)**	Toshkov, Chapter 10, pp. 285 - 297
Nov. 14	**Case Studies (2)**	Toshkov, Chapter 10, pp. 297 – 309 TBA Reading
Nov. 15	**R - TBA**	Lab
Nov. 19	**Mixed Designs (1)**	Toshkov, Chapter 11, pp. 310 - 327
Nov. 21	**Mixed Designs (2)**	Lammers, Pina Lena, Torsten Richter, Maren Lux, Jonah Ratsimbazafy, and Jasmin Mantilla-Contreras. "The Challenges of Community-Based Conservation in Developing Countries—a Case Study from Lake Alaotra, Madagascar." *Journal for Nature Conservation* 40 (2017): 100-12.
Nov. 22	**Developing your Poster**	Lab
Nov. 26	**Communicating Research**	Toshkov, Chapter 12, pp. 328 - 335
Nov. 28	**Thanksgiving**	
Nov. 29	**Thanksgiving**	
Dec. 3	**Ethics**	Toshkov, Chapter 12, pp. 335 - 344
Dec. 5	**Finalizing your Poster**	

Dec. 6	**R - TBA**	Lab
Dec. ?	**Poster Presentation**	Poster presentations will occur during the scheduled final examination time.
Dec. 18	**Paper Due**	